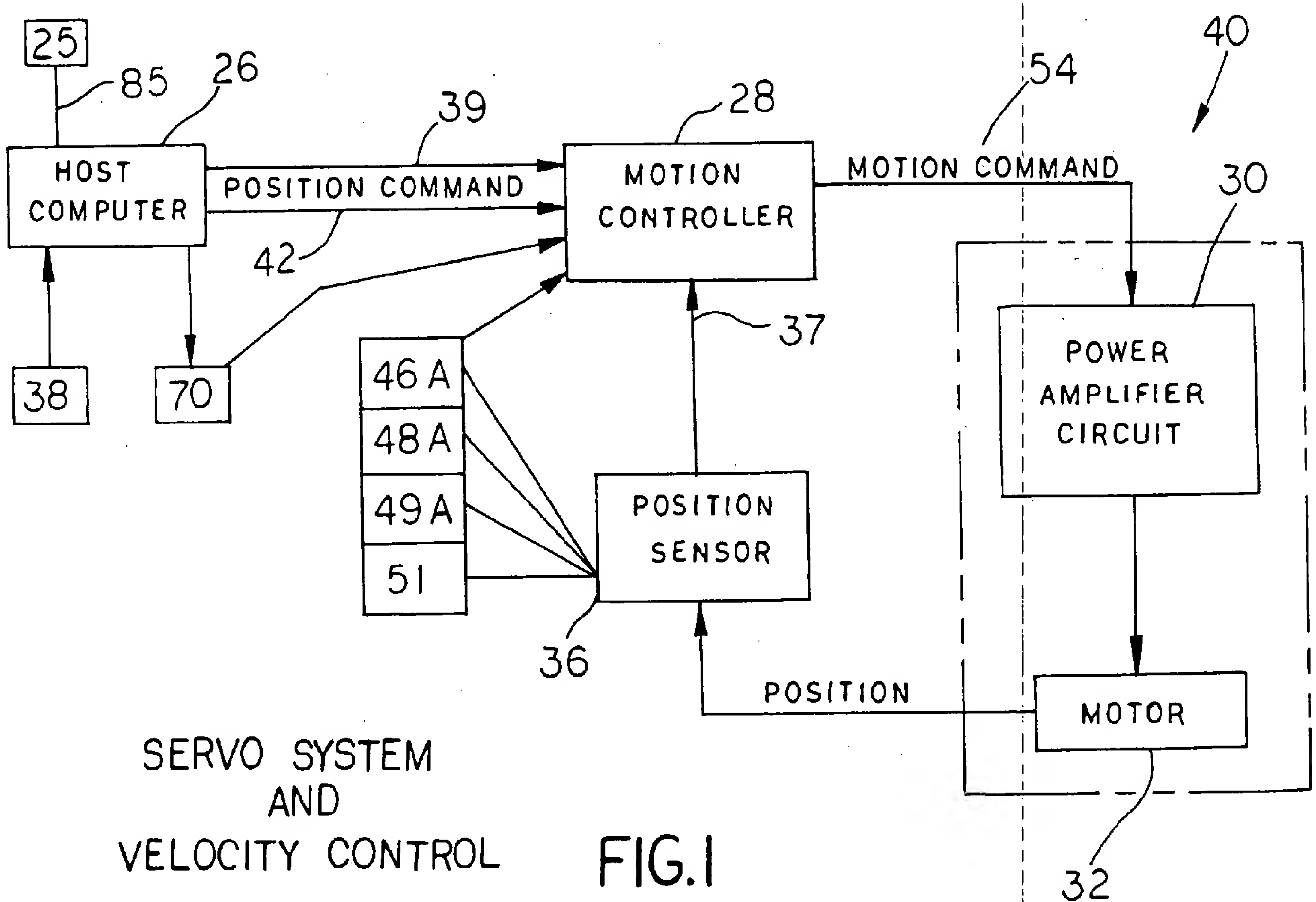

SERVO SYSTEM
AND
VELOCITY CONTROL

FIG.1

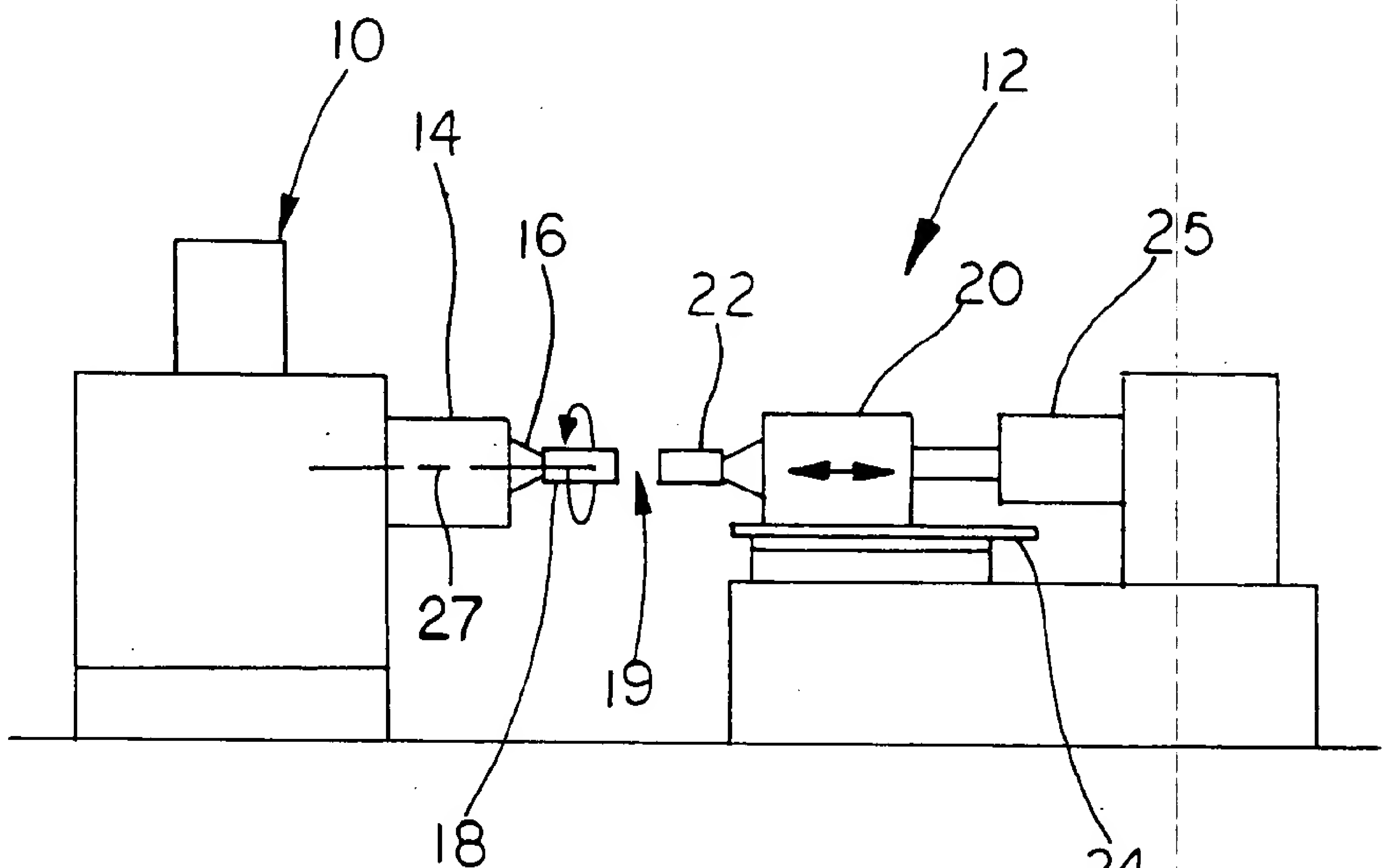

FIG.2

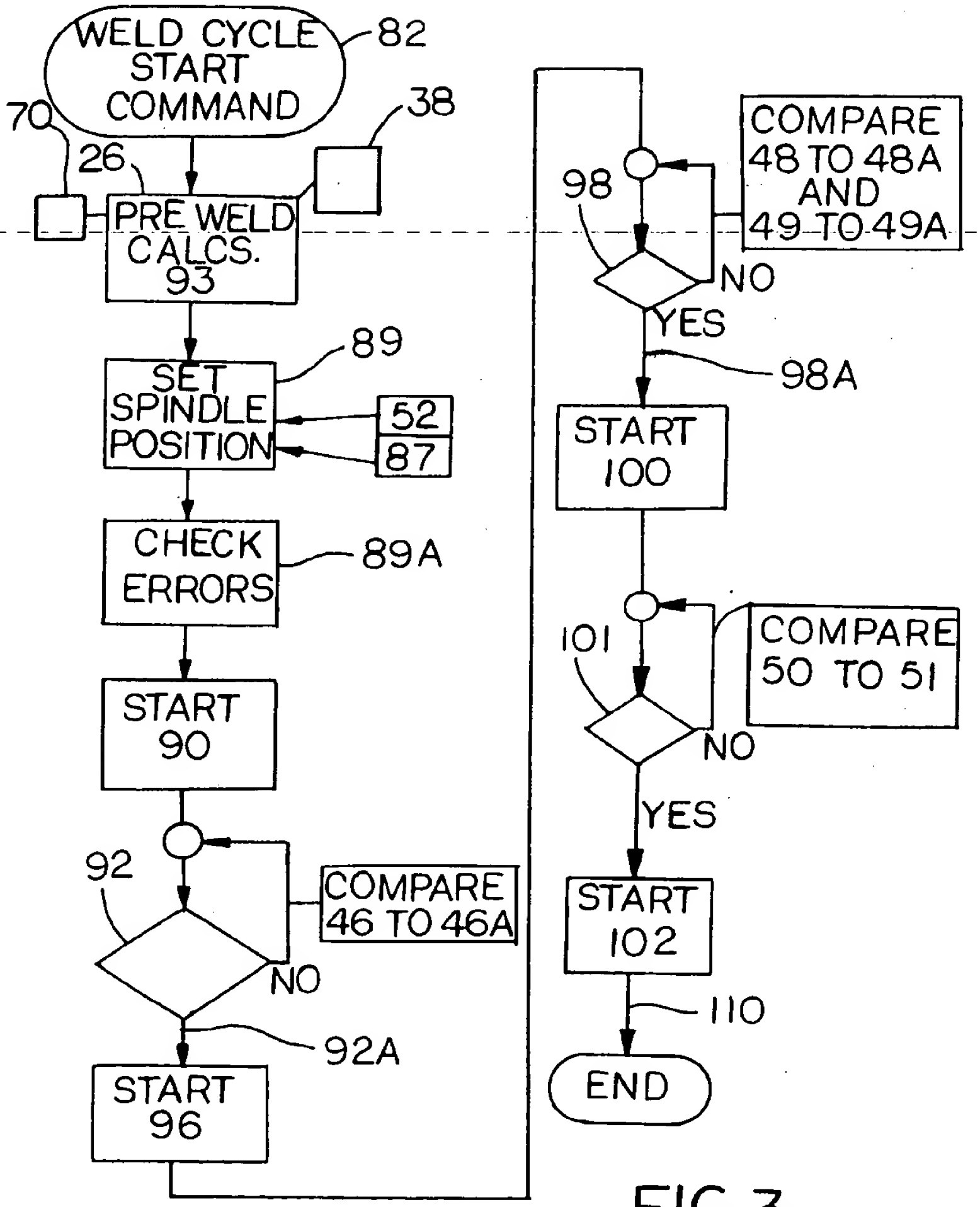

FIG.3

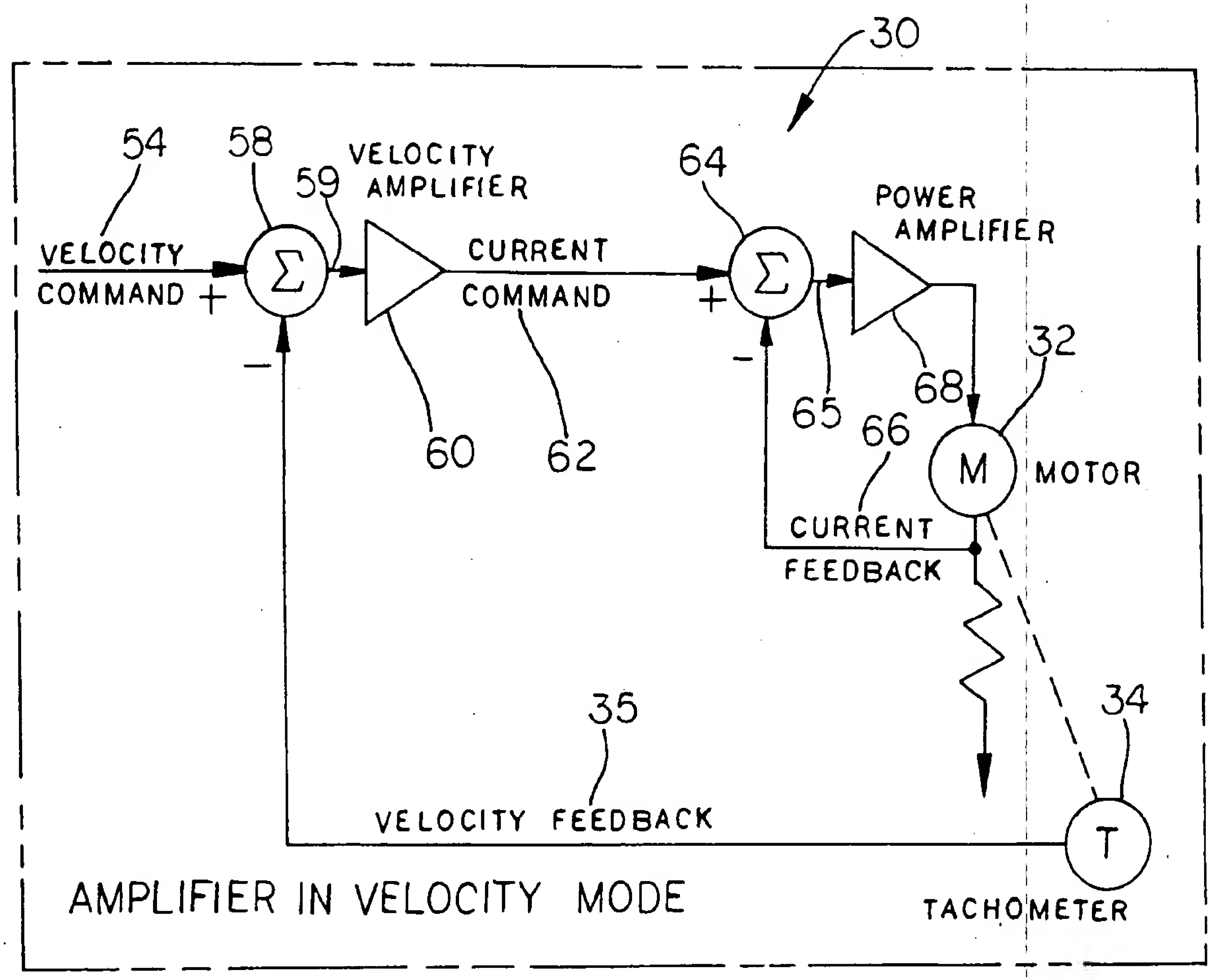

FIG.4

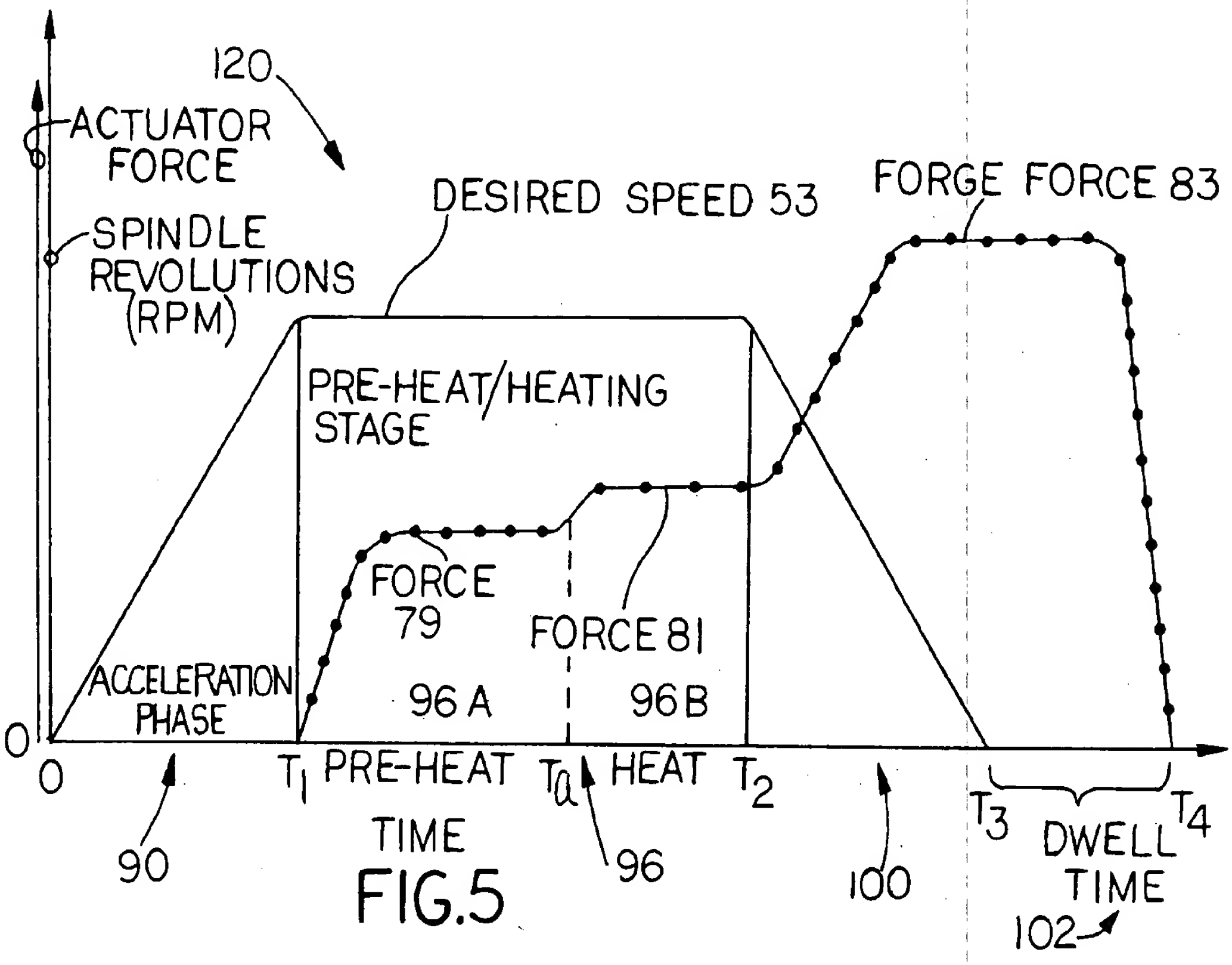

FIG.5

APPROVED BY DRAFTSMAN	C.C. PTO	
	CLASS	SUBCLASS

INPUT REGISTER 38

REFERENCE NUMBER	DESCRIPTION
6	MATERIAL CONSTANT (mC)
8	GEOMETRIC CONSTANT (gC)
42	DESIRED FINAL POSITION
73	MATERIAL TYPE
75	WORKPIECE WEIGHT
77	GEOMETRIC PROPERTIES
76	LENGTH OF FIRST WORKPIECE
78	LENGTH OF SECOND WORKPIECE
80	DESIRED LENGTH OF FINISHED PRODUCT

FIG.6

OUTPUT REGISTER 70

REFERENCE NUMBER	DESCRIPTION
39	DESIRED ANGULAR POSITION
44	DESIRED TOTAL SPINDLE ROTATIONS
46	DESIRED ACCELERATION ROTATIONS
48	DESIRED PRE-HEAT ROTATIONS
49	DESIRED HEATING ROTATIONS
50	DESIRED FORGE ROTATIONS
51	ACTUAL FORGE ROTATIONS
53	DESIRED ROTATIONAL SPEED
61	REQUIRED TIME AT PRE-HEAT FORCE LEVEL
63	PRE-HEAT DISTANCE
65	REQUIRED TIME AT HEAT FORCE LEVEL
67	HEAT DISTANCE
69	REQUIRED TIME AT FORGE FORCE LEVEL
71	FORGE DISTANCE
72	ROTATIONAL MOMENT OF INERTIA
74	TARGET UPSET DISTANCE
79	PRE-HEAT FORCE LEVEL
81	HEAT FORCE LEVEL
83	FORGE FORCE LEVEL
120	DESIRED SPINDLE PROFILE

FIG.7